

IN THE SPECIFICATION:

Please make the following amendments to the specification in the indicated paragraphs.

[0006] According to the invention there is provided a folded, expanding horn loudspeaker having a selectable plurality of acoustic drivers for a given frequency range. The loudspeaker unit provides a compact enclosure defining the folded, expanding horn and housing the acoustic drivers. A scalable number of identical acoustic drivers is provided, each having a relatively small cone or diaphragm, and each being located in a sealed back ~~chamber~~ chambers (i.e. e.g. a closed box baffle). The acoustic drivers radiate into volumetrically identical high pressure chambers located in front of the drivers. The acoustic drivers are preferably positioned with respect to one another in a linear array and may vary in number from 2 to 12. Each high pressure front chamber is coupled to a summing throat for the horn by an extended port which operates as a air pressure or air volume velocity step up transformer. The outlets of the ports are acoustically spaced from one another and differentially spaced from the mouth of the horn. Transducer drive circuitry applies drive signals to the acoustic transducers derived from a common source. The signals to the respective acoustic transducers are delayed to reflect the distance of the throats for the respective acoustic transducers from the mouth of the horn. The source signal is also as filtered and phase adjusted as required for clear reproduction of the sound.

[0022] Each extended throat **58, 60, 62 and 64** has a cross sectional area which is at least 20% of the area of ~~the~~ diaphragm for the corresponding acoustic drivers **26, 28, 30 and 32** ~~and 100% of that area of the corresponding diaphragms~~. Preferably the diaphragms of drives **26, 28, 30 and 32** are each about 3-1/2 times the area of the cross section of the extended throats. As the diaphragms move back and forth in alternating fashion to form compression waves in the air mass, the air in high pressure chambers **34, 36, 38 and 40** varies in pressure. The extended throats are relatively constricted in area when constructed the preferred ratio and function as pneumatic amplifiers increasing the volume velocity of

the air. Accordingly the movement of driver diaphragms **326, 328, 330, 332** can be made much smaller than is the case on the prior art because changes in air pressure in high pressure chambers **58, 60, 62** and **64** are relatively stiff. At the same time, the high pressure compression chambers **58, 60, 62** and **64** absorb much more power per unit of movement of the diaphragm allowing much larger driver motors **226, 228, 230** and **232** to be employed than in prior art devices. These motors may be two to three times as powerful as is conventional, ~~for example, a 6-inch woofer may be driven by a _____ watt drive coil.~~ For maximum power input diaphragms **326, 328, 330** and **332** may be pushed at velocities up to the point of destructive turbulence in the extended throats **58, 60, 62** and **64**.